

**ABSTRACT****Performance Monitoring in a Communications Network**

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A method of performance monitoring and a processor for performance monitoring in a communications network are provided. A signal is monitored over time by allocating a current signal quality characterization to the signal, selected from at least two such signal quality characterizations, such as perfect time, errored time and unavailable time. A plurality of time intervals making up a continuous succession of such time intervals are identified, such that a current time interval is terminated and a next time interval is initiated each time the signal quality characterization allocated to the signal changes. Then, a record of each identified time interval is generated and can be used to generate a performance log. Selected records may be manipulated to reduce the amount of memory required to store the records while intelligently degrading their accuracy.

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Figure 10.